

AEM – November 17th 2014
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Installation Progress



- pORC 1&2 complete*
- All readout racks on Platform
 - Only one Purity Monitor rack missing
- Laser system: Racks @ LArTF
 - ORC'd & cabling nearly complete
- HV system: HV rack @ LArTF
 - procedure for HV FT insertion was tested & installation next week
- Cryogenics: no significant welding work left. Preliminary safety walk-through.

Great coordination between different teams throughout

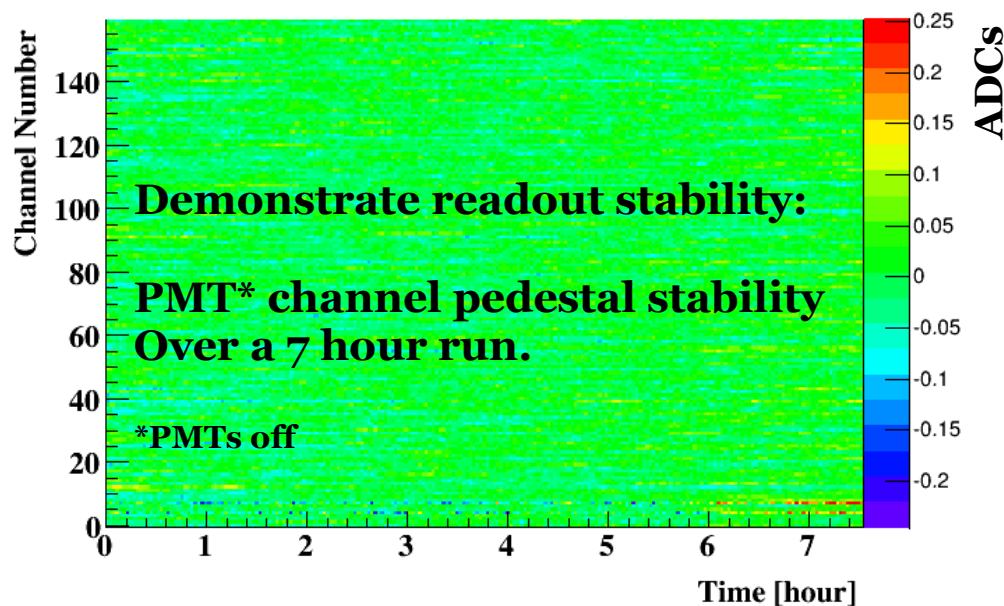
Installation Progress

A lot of cabling took place, excited we are almost done!

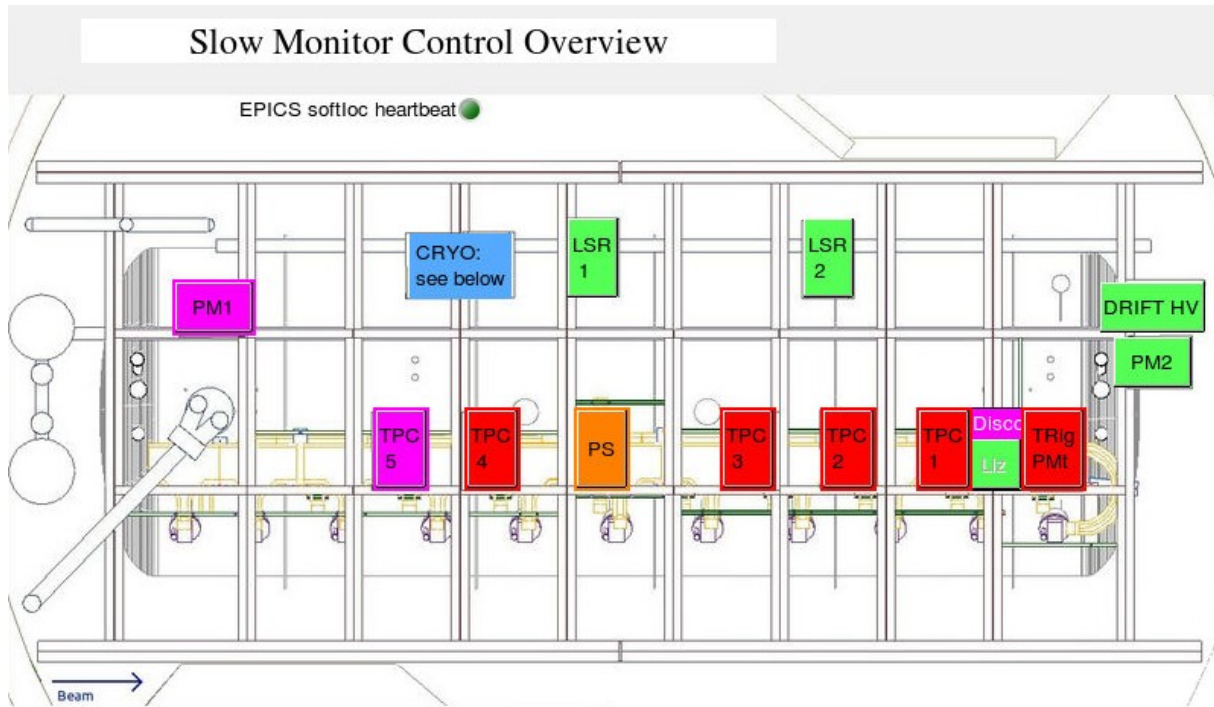
- Flanges 1-6 properly connected & strain-relieved
- All readout racks cabled up
- NIM logic for beam & external triggers in place



PMT Pedestal Mean Variation vs. Time



Not Just Hardware...



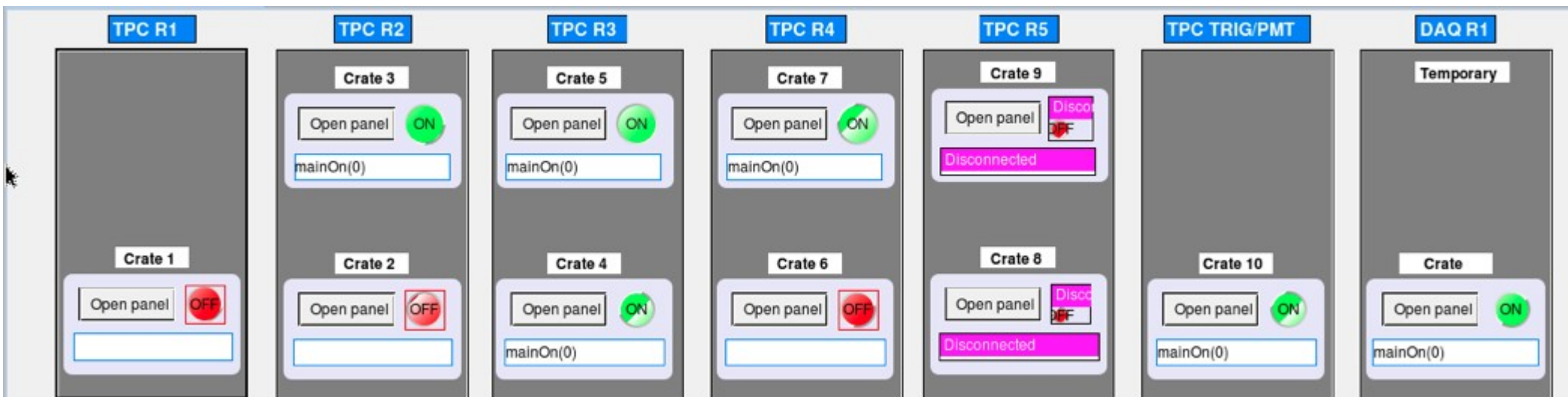
Rack power-up procedures developed and documented

Low-level electronics status monitoring

GUI for remote rack monitoring/operation

GUI for crate power supply control.

GUI for Wiener Power Supply Operation



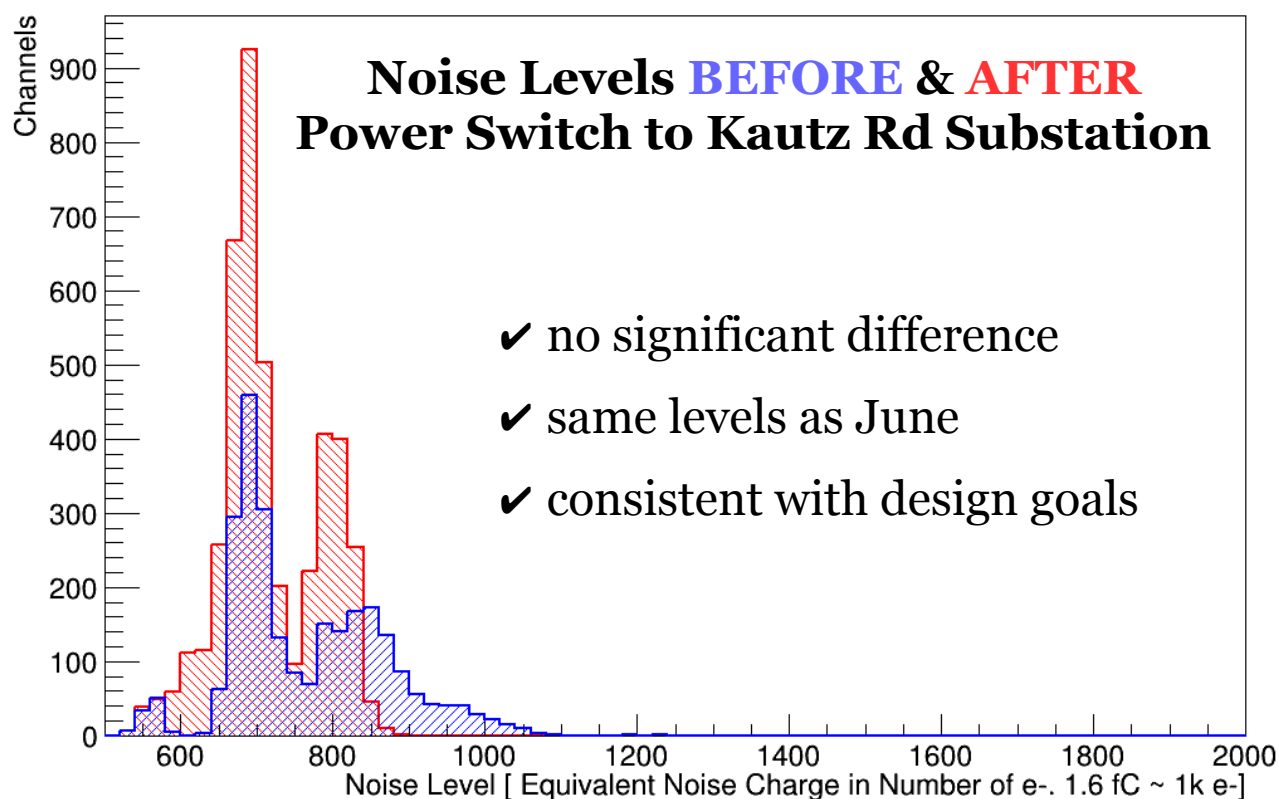
Exercising the Readout

First pORC right before power switch to Kautz Rd Substation.

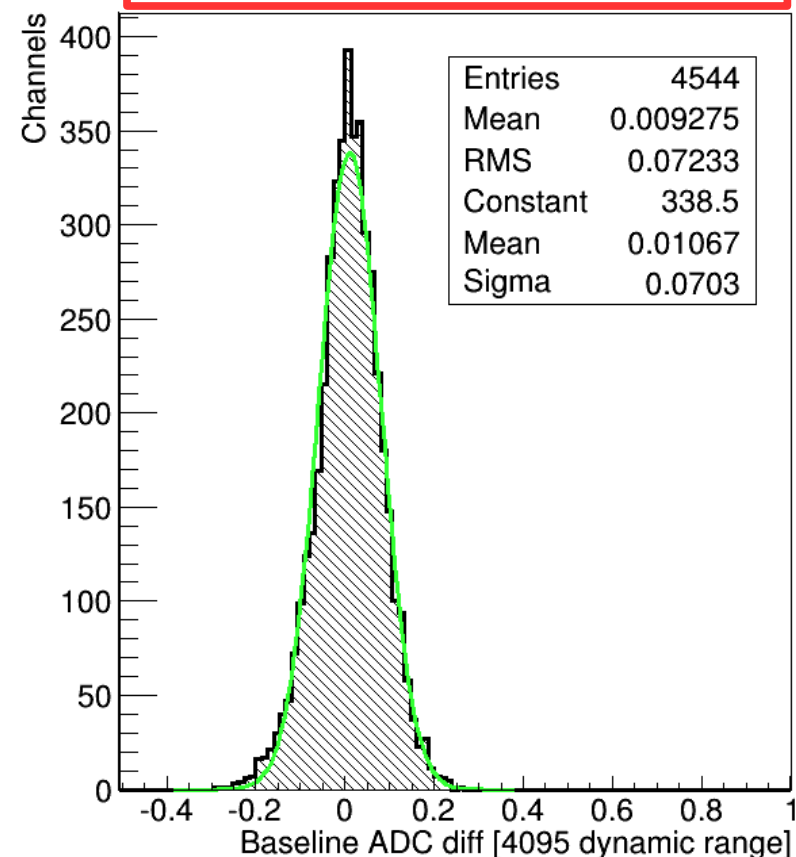
Took the opportunity to check effects on noise measurements while we tested readout.
Took data evening of Monday, Nov. 3rd and Saturday, Nov. 8th.

Demonstrated that the electronics on the platform function well and are stable over time.

RMS Noise Levels Measured on TPC Wires



Pedestal diff. per chan. [Before-After Kautz Rd.]



The Road Ahead

- Not just installation work. Lots of effort developing:
 - reconstruction tools
 - Smooth DAQ system
 - Online monitoring & Run control
 - Calibration efforts: TPC/PMT Calibration, E-field mapping w/ Laser
 - Cable up remaining flanges (this week)
 - Readout the full detector
 - Continue working on detector calibration: detailed noise/gain studies
 - Looking forward to final pORC!
- December CD4 review! Cool-down in January!



It Works!